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International Issue

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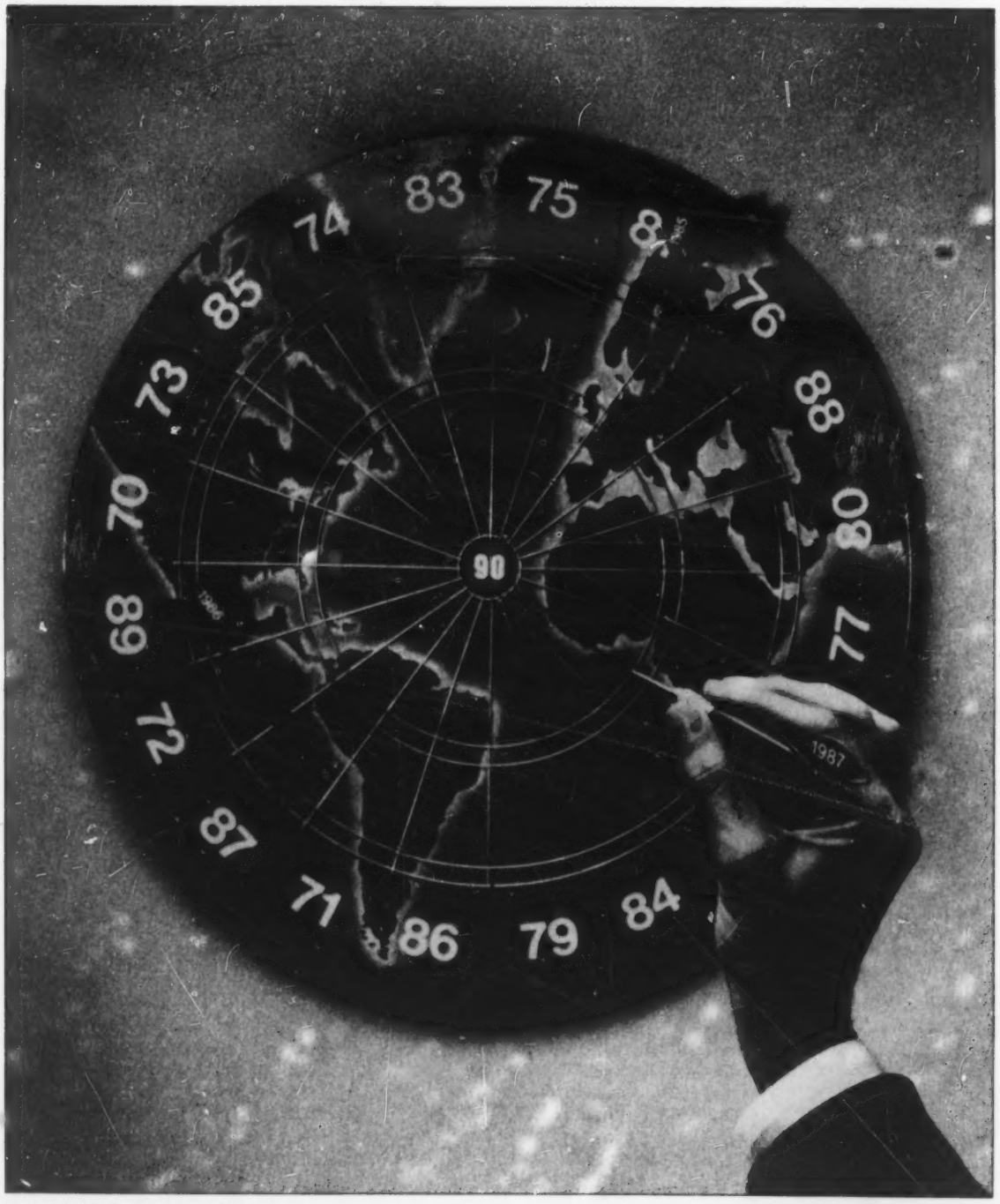
It Will Be Stagnant in '87



Cover art by Mike Zimmerman; design by Jim Colao

LARRY LANNON, EDITOR, AND CZATDANA INAN, MARKET RESEARCH DIRECTOR

WORLD telecommunications spending in 1987 will plod along at the drowsy pace it has set throughout the mid-1980s.

World spending continues to increase, but the rate of growth is expected to decline in 1987, though the decline will not be as sharp as during the 1984-85 period.

World spending in current U.S. dollars will hit $90.27 billion in 1987, up from the 1986 level of $87.418 billion. Spending in 1985 was $75.76 billion.

All the figures for this story are based on research done for "World Telecom Spending, 1986-87," this year's version of an annual report by the Telephony Market Research Department.

Real growth during 1987 is projected at 6.3%. Real growth last year was 6.6%. The projected decrease in the rate of real growth is 0.3%.

This is not the first time the rate of real growth has dropped this decade. In 1984, the rate of real growth plummeted by 5.7%. It dropped by a more modest 3% in 1985. Last year, the rate of real growth increased by 1.2%.

It remains to be seen whether the decrease in the rate of real growth projected for 1987 will reflect merely continued sluggishness in telecommunications spending or mark the beginning of a prolonged period of progressively slower growth.

Our measurements of world spending are based upon information supplied by national telecommunications administrations. Table 1 provides a detailed breakdown of national spending data for selected countries around the world. It should be noted that information from Soviet Bloc countries and the People's Republic of China is difficult to obtain. Consequently, this story will focus on spending patterns in the rest of the world.

International spending studies of necessity relegate national circumstances to a secondary role. This tendency is unfortunate, since national telecommunications administrations determine the character of telecommunications throughout most of the world, and national administrations are the products of specific national circumstances, needs and pressures. Each is significantly different from every other.

Though the telecommunications industry is truly international in scope and character, most telecommunications users obtain levels of service determined by purely national factors, a reality which can be obscured when international spending patterns are being analyzed.

As Table 1 illustrates, despite manifold differences among countries, at least one generalization remains obviously true. The industrial powers continue to spend far more on their telecommunications systems than other countries, and consequently benefit from much more sophisticated telecommunications networks.

The gap between those relatively few countries with sophisticated telecommunications networks and those which must labor in a highly competitive world economy handicapped by inadequate telecommunications networks has been much discussed in the past few years, particularly by officials at the International Telecommunication Union.

The extent to which world telecommunications spending continues to be dominated by a small group of industrialized countries is illustrated in Table 2. Twelve countries will spend more than $1 billion on telecommunications in 1987. Seven of the 12 are European countries. They are, in order, West Germany, which will spend $7.14 billion in 1987; France, which will spend $4.85 billion; the United Kingdom, $2.94 billion; Italy, $2.85 billion; Spain, $1.98 billion; Switzerland, $1.24 billion; and Sweden, $1.14 billion.

Three of the Big 12 countries are Pacific nations. They are, in order, Japan, which will spend $8.9 billion; South Korea, $1.47 billion; and Australia, $1.04 billion.

Two of the Big 12 are North American countries which have borders on both the Pacific and Atlantic Oceans. They are the United States, which will spend $24.52 billion in 1987, and Canada, which will spend $2.11 billion.

The importance of the Big 12 to the world telecommunications market cannot be overestimated. As a group, the 12 biggest spenders will spend 66.4% of the total amount spent on telecommunications equipment this year. The entire rest of the world will account for only one-third of all telecommunications expenditures. The rest of the world—a group which includes smaller but highly industrialized nations such as the Netherlands and Taiwan—will spend a total of $30.09 billion less than the Big 12.

In other words, the United States, France and Australia will spend more money on telecommunications in 1987 than the rest of the world combined, if the nine other members of the Big 12, the Soviet Bloc countries and China are excluded. By itself, the United States will account for 27% of world telecommunications spending in 1987.

The Bedrock

A cursory examination of Table 2 demonstrates the continuing importance of Europe to the international telecommunications industry. The seven European members of the Big 12 will spend $22.14 billion in 1987. The three Pacific nations in the group will spend $11.41 billion in 1987, or roughly half the amount the seven European members will spend on telecommunications. The two North American members of the Big 12 will spend $26.63 billion on telecommunications in 1987.

Of the three geographic classifications into which members of the Big 12 fall, the group with the fewest members will spend the largest amount of money this year. Both North American countries are also

conveniently located between the two world's major commercial oceans and between the European and Pacific nations, at least insofar as traffic traveling through the Western Hemisphere is concerned.

The Pacific may be the most dynamic economic region in the world today. The regional dynamism of the Pacific is reflected in the growing strength of the national telecommunications industries of Japan, Australia, South Korea and Singapore. But for the moment at least, the Pacific must rank behind Europe and North America in terms of its importance to the international telecommunications industry.

None of the Big 12 nations is located in Africa or South America, and only one, South Korea, is on the Asian mainland. No Middle Eastern country is among the Big 12, either.

Of course, many countries in the developing world continue to strive to upgrade their telecommunications networks. Brazil, for instance, will spend a projected $889 million in 1987, up from the estimated $850 million it spent last year, an increase of 3.5%. South Africa, despite its well publicized social and political problems and the recent tendency for those problems to sap its economic vitality, will spend $599.2 million in 1987, down 5.6% from the $634.7 million it spent on telecommunications last year. Zambia, which spent $37 million in 1986, will slash its telecommunications expenditures $14.4 million, or 39%, to $22.6 million in 1987.

In the Caribbean, Barbados, which spent $8.5 million in 1986, will increase its telecommunications expenditures by $1.5 million, or 17.6%, to $10 million this year. Jamaica projects an increase of $5 million, or 25%, from $20 million last year to $25 million in 1987. On the other hand, Trinidad and Tobago will prune a whopping $34.3 million from 1986 expenditures of $67.3 million to projected 1987 expenditures of $33 million, a 51% reduction. Bermuda will follow a comparable course, cutting 1986 expenditures of $8 million by $4.1 million to the projected 1987 level of $3.9 million, a decrease of 51.3%.

Despite the economic crisis which continues to vex all Latin America

TABLE 1 1985-1987 WORLD CONSTRUCTION EXPENDITURES ($000,000)

	IN CURRENT US$[a]		
	1985	1986	1987[b]
ZONE 1: NORTH AMERICA			
United States			
Regionals	14,743.6	14,366.8	14,422.8
Independents	5,309.9	5,625.8	5,714.0
Interexchange	4,320.9	4,552.1	4,386.0
Canada			
Bell Canada[c]	997.7	1,081.1	1,284.4
Other Telecom Canada	783.4	820.4*	827.6*
Barbados	11.6	8.5	10.0
Bermuda	6.6	8.0	3.9
Jamaica	20.0	20.0	25.0
Trinidad & Tobago	67.7	67.3	33.0
Subtotal	26,261.4	26,550.1	26,706.7
Extrapolated:			
Current US$	27,643.6	27,947.5	28,122.3
Constant (1983) US$[d]	25,024.9	25,900.8	26,807.3
ZONE 2: AFRICA			
Kenya	4.4	10.5	11.6
South Africa	593.8	634.7	599.2
Zambia	38.6	37.0	22.6
Zimbabwe	44.6	51.4	47.6
Subtotal	681.4	733.6	681.0
Extrapolated:			
Current US$	1,362.8	1,467.2	1,362.0
Constant (1983) US$	2,102.8	2,176.4	2,252.6
ZONE 3-4: EUROPE			
Austria	577.8	723.8	765.1
Belgium	369.9	514.9	492.6
Denmark			
Jydsk	71.9	134.3	141.8
KTAS	90.0	139.0*	158.0*
Finland			
Association	152.5	216.9	236.6
PTT	111.2	157.7	177.4
France	3,786.6	4,750.5	4,853.0
Germany, West	4,660.9	6,705.2	7,141.5
Italy	2,289.0	2,782.4*	2,850.0*
Netherlands	390.2	578.7	575.9
Norway	416.7	506.9	556.9
Portugal			
TLP	73.8	101.5	111.5
Spain	1,105.3	1,494.1	1,981.4
Sweden	624.9	903.6	1,140.0
Switzerland	880.6	1,254.2	1,243.7
United Kingdom	2,559.8	3,032.3	2,935.4
Subtotal	17,861.1	23,996.0	25,334.8
Extrapolated:			
Current US$	21,013.1	28,230.6	29,805.6
Constant (1983) US$	24,236.5	25,084.7	25,962.7
ZONE 5: SOUTH & CENTRAL[aa] AMERICA			
Brazil	850.0	850.0*	875.0*
Costa Rica	19.1	23.4	26.1
Chile	19.1	39.5	117.9
Colombia	11.8	13.8	58.1[bb]
Mexico	523.2	455.1	772.3
Peru	16.6	28.2	80.0
Uruguay	12.8	59.3	87.4
Venezuela	113.3	315.2	369.6
Subtotal	1,565.9	1,784.5	2,386.4
Extrapolated:			
Current US$	2,237.0	2,549.3	3,409.1
Constant (1983) US$	2,730.6	2,826.2	2,925.1

ZONE 6: PACIFIC			
Australia	975.5	1,043.3	1,042.0
Indonesia	249.3	656.9	727.4
New Zealand	232.3	300.6	327.9
Singapore	196.7	189.2	170.9
Thailand	192.2	218.3	346.3
Philippines	62.0	95.8[aa]	79.0[aa]
Subtotal	1,908.0	2,504.1	2,693.5
Extrapolated:			
Current US$	2,385.0	3,130.1	3,366.9
Constant (1983) US$	2,995.8	3,100.7	3,209.2
ZONE 7: USSR[c]			
Current US$	6,448.0*	6,705.5*	6,974.1*
Constant (1983) US$	6,427.4	6,652.3	6,885.1
ZONE 8: FAR EAST			
Hong Kong	76.8	121.5	109.4
Japan	6,961.0	9,388.9[e]	8,900.0*
Korea, Rep.	1,339.3	1,399.0	1,469.6
Taiwan	467.7	514.2	797.6
Subtotal	8,844.8	11,423.5	11,276.6
Extrapolated:			
Current US$	11,056.0	14,279.4	14,095.8
Constant (1983) US$	12,247.3	12,675.9	13,119.6
ZONE 9: MIDDLE EAST			
India	587.9	643.8	620.9
Kuwait	177.2	96.0*	102.7*
Oman	192.0	81.0	85.0*
Israel	278.1	267.1[aa]	293.2[aa]
Subtotal	1,235.2	1,087.9	1,101.8
Extrapolated:			
Current US$	3,529.1	3,108.3	3,148.0
Constant (1983) US$	3,487.0	3,609.1	3,735.4
GRAND TOTAL			
Identified Countries	64,805.8	74,785.2	77,154.9
Extrapolated:			
Current US$	75,674.6	87,417.9	90,273.8
Constant (1983) US$	79,252.3	82,026.1	84,897.0
GROWTH in Current US$ versus Constant (1983) US$	−4.5%	+6.6%	+6.3%

Source: Telephony, a division of Intertec Publishing Corp.
* estimated by Telephony
a: at average annual exchange rates of U.S. Federal Reserve System and the International Monetary Fund
aa: average annual rate November 1986
b: at 1986 average annual exchange rates
bb: based on 1986 report; subsequent attempts to verify were unsuccessful
c: Bell Canada is part of Telecom Canada companies
d: assumes 3.5% average inflation during 1983-87 (U.S. GNP deflator)
e: assumes addition of 3 million lines annually during 1986-90 five-year plan, which sets telecommunications as "key" objective
f: reflects drop in average annual exchange rate of 238.47 yen = US$1 to 168.35 in 1986

TABLE 2 TOP 12 COUNTRIES (EXPENDITURES IN 1987 TO EXCEED $1 BILLION)

Rank	Country	1987 Expenditures (US$000,000)	1986 Expenditures (US$000,000)	Increase (Decrease)	(%)
1.	U.S.	24,522.8	24,544.7	(22.4)	(0.1)
2.	Japan	8,900.0	9,388.9	(488.9)	(5.2)
3.	W. Germany	7,141.5	6,705.2	436.3	(6.5)
4.	France	4,853.0	4,750.5	102.5	(2.2)
5.	U.K.	2,935.4	3,032.3	(96.9)	(3.2)
6.	Italy	2,850.0	2,782.4	67.6	(2.4)
7.	Canada	2,112.0	1,901.5	210.5	(11.1)
8.	Spain	1,981.4	1,494.1	487.3	(32.6)
9.	S. Korea	1,469.6	1,399.0	70.6	(5.0)
10.	Switzerland	1,243.7	1,254.2	(10.5)	(0.8)
11.	Sweden	1,140.0	903.6	210.4	23.3
12.	Australia	1,042.0	1,043.3	(1.3)	(0.1)

and the acute political tension which grips the Central American isthmus, Costa Rica plans to spend $26.1 million on telecommunications in 1987, up $2.7 million, or 11.5%, from the $23.4 million spent last year.

Some South American countries are reporting extremely ambitious telecommunications spending plans, despite the concurrent economic, social and political crises with which many, particularly in the northern part of the continent, must contend. For example, Peru reported plans to spend $80 million on telecommunications in 1987, compared to the $28.2 million it spent last year. To meet its goal for 1987 spending, Peru must increase telecommunications spending by a robust $51.2 million, or 184%.

But Peru's plans are modest compared to Colombia's goal of increasing its telecommunications expenditures by $44.3 million in 1987. Since Colombia spent $13.8 million in 1986, if its plans are to be realized, it must spend $58.1 million in 1987, a spectacular 321% increase. Chile, on the other end of the continent but like Colombia troubled by political conflict, indicates that it plans to increase its telecommunications spending by $77.5 million in 1987, a 196% increase from $39.5 million in 1986 to $117.9 million this year.

Not all South American countries are laying such monumental plans. Uruguay, one of the politically most stable countries on the continent, spent $59.3 million in 1986. It plans to boost its telecommunications spending by 47.4%, or $28.1 million this year to $87.4 million.

In the Pacific, Singapore will cut its spending by 9.7%, from $189.2 million in 1986 to $170.9 million in 1987. The Philippines will spend $79 million in 1987, down $16.8 million, or 17.5%, from the $95.8 million it spent in 1986. Hong Kong also will reduce its spending. After spending $121.5 million in 1986, it will spend $109.4 million in 1987, a reduction of $12.1 million, or 11%.

In the Middle East, Oman will increase its expenditures by $4 million, or 4.9%, from $81 million in 1986 to $85 million in 1987. Kuwait will increase its spending by $6.7 million, or 7%, from $96 million in 1986 to $102.7 million in 1987. Israel's

spending will go from $267.1 million in 1986 to $293.2 million in 1987, an increase of $26.1 million, or 9.8%.

One comparison may serve to graphically illustrate the differing priorities nations give to telecommunications and the gap between poor and competitive nations. India is the third most populous country in the world. Within itself, it contains many of the social and economic extremes which confront much of the world. India possesses a significant industrial base and a large number of highly educated professionals. But it remains a largely agricultural country with many uneducated, illiterate people to support. Taiwan is emblematic of the up and coming, industrialized Pacific nations. Taiwan also is much smaller than India, both in terms of territory and population.

In 1986, Taiwan spent $514.2 million on telecommunications equipment. India spent $643.8 million on telecommunications last year. In 1987, Taiwan plans to increase its telecommunications expenditures by $283.4 million, or 55.1%, to $797.6 million. India, on the other hand, will reduce its expenditures by $22.9 million, or 3.6%, to $620.9 million. Despite the difference in the size of the two Asian industrial powers, India will spend less on telecommunications in 1987 than Taiwan.

If sophisticated telecommunications networks are essential to constructing competitive national economies, can countries like India or Taiwan look forward with greater confidence to competing in the world economy of the 1990s? To ask the question is to answer it.

Table 3 reviews the 10 top growth budgets among countries which plan to spend more than $100 million per year and whose plans do not call for increases of more than 100% per annum, as do Colombia's and Chile's, for instance.

Three European countries are listed in Table 3. Spain, with a projected growth rate of 32.6%, ranks fourth. Sweden ranks fifth with a projected growth rate of 23.3%. Finland's projected growth rate of 10.4% ranks ninth.

Two Latin American and one North American country also are listed among the top 10 in terms of growth. Mexico ranks first with a projected growth rate of 69.7%. Venezuela ranks sixth with a projected growth rate of 17.3%. Canada ranks seventh with a projected growth rate of 11.1%.

TABLE 3 TOP 10 GROWTH BUDGETS, 1986-87 (MORE THAN $100 MILLION/YEAR)

Rank	Country	1987 Expenditures (US$000,000)	1986 Expenditures (US$000,000)	Increase	(%)
1.	Mexico	455.1	772.3[a]	317.2	(69.7)
2.	Thailand	218.3	346.3	128.0	(58.6)
3.	Taiwan	514.2	797.6	283.4	(55.1)
4.	Spain	1494.2	1981.4	487.2	(32.6)
5.	Sweden	903.6	1114.0	210.4	(23.3)
6.	Venezuela	315.2	369.6	54.4	(17.3)
7.	Canada	1901.5	2112.0	210.5	(11.1)
8.	Indonesia	656.9	727.4	70.5	(10.7)
9.	Finland	374.6	414.0	39.4	(10.5)
10.	New Zealand	300.6	327.9	27.3	(9.1)

a: Calculated at November 1986 average exchange rate

Four Pacific countries round out the list. Thailand ranks second with a projected growth rate of 58.6%. Taiwan's 55.1% projected growth rate ranks it third in the top 10. Ranked in the eighth spot is Indonesia, which projects a growth rate of 10.7%. New Zealand, with a projected growth rate of 9.1%, ranks tenth.

Three of the top 10 growth countries are from parts of the world which do not usually attract the telecommunications limelight. Thailand is from the Asian mainland. Venezuela is from the South American mainland and Mexico forms the largest part of the isthmus connecting North America and South America.

Two additional points are noteworthy about Table 3. First, only three countries—Spain, Sweden and Canada—appear both among the 10 leading growth countries and the 12 largest spenders. This fact may reflect the stability and maturity of the most industrialized countries, which dominate the 12 largest spenders list, as much as the relative dynamism of the other countries, which dominate the list of 10 leading growth countries.

Second, among the 10 leading growth countries, six border the Pacific Ocean (the four Pacific nations, Canada and Mexico). Assuming the ambitious plans sketched out by some of the countries on the top of the growth list can be realized, Table 3 may suggest a geography for further telecommunications development in the future.

Table 2 demonstrates a trend which buttresses the suggestion that the Pacific Rim will fuel growth in telecommunications spending in the future. Five of the 12 countries which will spend more than $1 billion in 1987 on telecommunications actually will decrease spending from 1986 levels. They are the U.S., Japan, the U.K., Switzerland and Australia.

The U.S. and Australia will reduce their spending by the smallest of amounts (0.1%), so their spending habits are basically unchanged since 1986.

Two of the other three countries are European. Both the U.K. and Switzerland, of course, have mature economies. Japan's sharp decline in spending—5.2%—may reflect its transition from a monopoly to a liberalized market more than a slowing in economic growth and, consequently, in the growth in telecommunications demand. NTT probably is retrenching as it prepares to enter a much more competitive period.

Five of the Big 12 countries border the Pacific. Australia and the U.S. have reported only the smallest declines in telecommunications spending. Japan has reported a sharp decline, but one that seems related to transitions within its telecommunications industry rather than its national economy. Canada reports a robust growth rate of 11.1% in spending. South Korea continues to steadily increase its telecommunications spending, this year by 5%.

Five of the seven European members of the Big 12 plan to increase their telecommunications spending in 1987. West Germany will spend 6.5% more this year than it did last, a steady growth rate. France and Italy report modest growth, 2.2% and

Continued on page 44

2.4%, respectively. Sweden and Spain report very significant growth rates. Sweden plans to increase telecommunications spending by 23.3% and Spain by an even greater amount, 32.6%.

Short-term growth rates among the big spenders suggest that the more mature telecommunications networks are not entering a period of rapid absolute growth but are redirecting their efforts to diversify the types and increase the volumes of the traffic they carry.

In some countries, particularly Japan and the U.K., this shift is related to liberalization policies which loosen the hold of monopolies upon national markets. Liberalization compels newly competitive organizations, like British Telecom in the U.K. and NTT in Japan, to anticipate and respond to rapidly changing demands and puts their revenues at risk for the first time. Both those factors come into play in the business market, the market liberalization not coincidentally is designed to benefit the most.

For instance, Figure 1 shows the distribution of NTT's revenues in 1986 among the various kinds of services it offers. Telephone services clearly remain dominant. However, the figure also identifies eight other services which contribute to NTT's revenue stream. In addition, basic business service is included among the telephone services. Business telephone service and the other non-telephone services shown in Figure 1 are subject to competition under Japan's liberalization policy and, thus, at risk.

Table 4 suggests how important the newer types of services are to NTT's growth. Note that growth in the number of telephone lines, while steady, hovers at 3.6%, far from a spectacular rate. Growth in some of the newer services which will appeal primarily to businesses is much higher. For instance, NTT anticipates that the number of facsimile service subscribers will grow by 154% during the 1985-87 period. Subscriber growth during this two-year period in videoconferencing is expected to be 112.5%; in high-speed data, 59.1%; and in mobile service, 53.8%.

High-risk markets are growth markets in countries pursuing a policy of liberalization. NTT can be expected to shift its investment to those markets to reflect the changed conditions prevalent in Japan. Other organizations placed in similar positions can be expected to do the same.

The extent to which this pattern becomes a global pattern depends on the extent to which the industrialized countries which have state-operated telecommunications monopolies adopt liberalization policies. In 1986, liberalization seemed to be a wave of inexorable power fated to wash over all industrialized countries. But the wave already may have crested and broken in much of the world.

The progress liberalization policies make during 1987 may determine whether open market principles attain more widespread influence or are confined largely to North America, Japan and the U.K., places where governments already are committed to them to one degree or another. □

FIGURE 1 20/80 RULES NTT'S REVENUES (BASE: $28.3 BILLION FISCAL 1986)

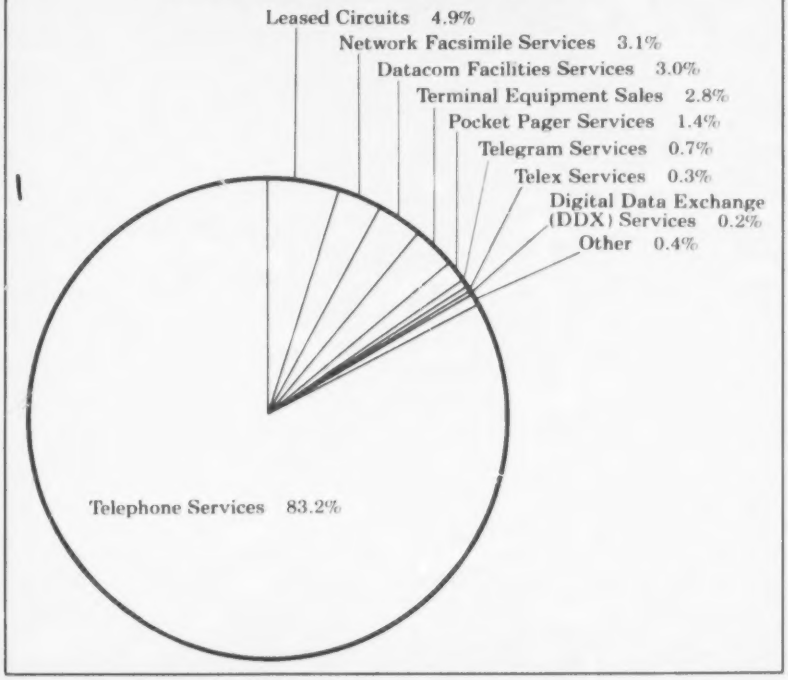


TABLE 4 NTT SUBSCRIBER AND LINE GROWTH FISCAL 1984-86

Lines	1986 Installed	% Growth 1983-1984	1984-1985	1985-1986
Telephone Access Lines	46,094,000	3.3%	3.6%	3.7%
Public Telephones	910,000	0.3	0.4	-2.7
Leased Circuits	473,000	5.6	5.5	7.2
DDX: Circuit Switched	3,687	107.1	67.8	37.7
Packet Switched Type 1[a]	12,039	296.7	120.4	81.7
Type 2[b]	1,715	—	—	—
High Speed Digital Circuits	1,778	—	—	114.7
Subscribers				
Pocket Pagers	2,156,000	15.2	14.6	14.3
Mobile Service	62,103	37.3	48.5	53.8
Facsimile	46,271	266.9	90.7	154.0
Telex	36,000	-12.8	-17.1	5.9
Videotex[b]	13,381	—	—	133.5
Videoconference	18	—	166.7	112.5
High Speed Digital Circuits	288	—	—	59.1

a: personal computer access introduced fiscal 1986
b: introduced November 1984

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NARUC nixes higher SLC for this year

Halprin preparing to leave FCC

NY Tel crews work nonstop to repair fire damage

Plessey exec: S-C soft on RHC link

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call completion through hotels and coin stations.

TOPS MP also will allow the caller to reach a person with an unpublished number. The operator would contact the unlisted party and deliver the caller's name and number. The unlisted party could then return the call. The calling party would be charged for this service.

Another new revenue producing service will be message delivery. If a line is busy, the caller may leave a message with the operator and the operator will deliver the message a specific time or call the number at regular intervals until the call is answered.

Northern Telecom has received approximately 70 TICS orders from Independent telcos, according to a company spokesman. Three RHCs also are "looking into" the system, he added. An unidentified BOC, is scheduled to trial the call completion feature in 1988.

International 800 firm sues AT&T

Worldwide 800 Services, a company which arranges international toll-free telephone service, is suing AT&T in U.S. District Court for allegedly making false advertising claims and taking anti-competitive action. Worldwide 800 Services is also filing complaints with the Federal Trade Commission and the Federal Communications Commission.

Worldwide 800 Services is a subsidiary of HITK Corp., a company headed by Chief Executive Officer Stanley B. Scheinman, who served as a senior vice president of MCI Communications during that company's antitrust lawsuit against AT&T.

In a Washington press conference announcing the legal action, Scheinman said AT&T ads for international 800 service incorrectly state that only AT&T can provide 800 service to international locations, and that AT&T can provide service on a city-to-city basis abroad. In addition, AT&T ads imply that the company has a presence in foreign cities where it actually only uses the local network, said Scheinman.

Through its subsidiary, Service 800, Worldwide 800 Services has provided international 800 service for the past 12 years, the company states. Its suit, filed in U.S. District Court in Illinois, charges AT&T with violations of U.S. and Illinois laws against deceptive practices and consumer fraud. Worldwide 800 Services seeks monetary damages, injunctive relief and a court order directing AT&T to place corrective advertising.

An AT&T spokesman said the company has not yet seen the lawsuit, but does not generally comment on legal actions.

Correction

The article "Carrier Spending Hits a $24 Billion Plateau" in the Jan. 12 issue of TELEPHONY contained a table which incorrectly stated that Southwestern Bell has 100,078 miles of installed fiber optic cable as of Dec. 31, 1986. The telco actually has 170,396 fiber miles installed as of that date.

Digitech alternate equal access unit shines in trial

Digitech Communications and Southwestern Bell successfully completed a field trial of the Digitech E-A-S 20/20, a system which permits telcos to convert No. 5 crossbar switches to equal access.

The trial opens the door for Digitech to aggressively market the E-A-S 20/20 as a short-term solution for Bell regional holding companies which are trying to meet equal access conversion deadlines. "We're going to sell as many as we can as fast as we can," said Digitech Communications President Wes Rogers. "After 1990 [the deadline for RHC equal access conversion] the market for these begins to dry up."

The primary RHC candidates for use of the E-A-S 20/20, in addition to Southwestern Bell, are Nynex, Pacific Bell and BellSouth, according to Rogers. Nynex had the lowest conversion rate at the Sept. 1, 1986, deadline for 75% equal access conversion. The remaining RHCs recently gave the Department of Justice revised schedules for converting non-conforming offices.

The system has been in development since April 1985. Its field trial, involving approximately 50 customers and three interexchange carriers, turned up only a few software glitches, which were ironed out, said Rogers. "There were no problems apparent to the users, and no switching or Digitech equipment failures. We lost no billing."

The E-A-S 20/20 will aid in reaching equal access goals by enabling telcos to convert No. 5 crossbar switches, saving both time and money, according to David Serra, manager of IXC business relations for Southwestern Bell.

Los Angeles County Transportation Commission

Long Beach-Los Angeles Rail Transit Project

Supervisory Control and Data Acquisition System

Notice is hereby given that the Los Angeles County Transportation Commission (LACTC) will receive proposals on April 17, 1987 at 2:00 p.m. for Contract No. R01-T07-H831 for Furnishing, Installing, and Testing, a Supervisory Control Data and Acquisition System including all applicable software, hardware, and interconnections to transmit and receive data between substations, passenger stations, rights-of-way, the transit radio system and the central control facility.

Proposal forms, instructions and contract documents may be examined and/or purchased at the LACTC Offices during the hours of 9:00 a.m. to 4:30 p.m. For purchase, a certified check or money order made payable to LACTC, or cash, is required. All requests for mailing of documents must be submitted to the LACTC before April 10, 1987 to insure timely delivery.

The LACTC hereby notifies all proposers that it will affirmatively insure than in any contract entered into pursuant to this advertisement, Disadvantaged and Women Business Enterprises will be aforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

Bidder proposers are advised that this contract is subject to the provisions of the Work Continuation Agreement between the LACTC and LA County Building and Construction Trades Council (AFL-CIO) which requires payment of prevailing wages in compliance with an apprentice employment training program.

RFP Available: Beginning 2/16/87. **Preproposal Meeting**: 3/3/87 at 10 a.m. **Proposals Due**: 4/17/87 at 2 p.m. **Document Purchase Price** (non-refundable): Pick-up at Contract Administration counter: $150. Delivered by Overnight Mail: $175. **Address**: Los Angeles County Transportation Commission, 403 West 8th Street, Suite 500, Los Angeles, CA 90014. For RFP Purchase: Attn: Contracts Administration. For Proposal Delivery: Attn: Contracts Administration. For Preproposal Meeting: 7th Floor Conference Room.

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